

What is claimed is:

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1 A data packet multi-access communicating method comprising steps of:

5 transmitting a data size and a utilization demand of a maximum rate to a base station in case of transmitting continuous data in large quantities in mobile station side and

10 variably changing a transmission rate according to the maximum rate indicated by said base station in said mobile station side.

2 A data packet multi-access communicating method comprising steps of:

15 receiving a transmission demand from each mobile station in base station side,

determining a maximum rate for each mobile station at that time by taking account of radio wave propagation condition under which said each mobile station is presently situated, data size and a priority order in base station side and

20 notifying said each mobile station of said maximum rate in base station side.

3 A data packet multi-access communicating method comprising steps of:

25 transmitting a data size and a utilization demand of a maximum rate to a base station in case of transmitting

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maximum rate controlling means for controlling a maximum value of the transmission rate to said variable rate communication path coding means, in accordance with maximum rate information determined by taking account of

transmission condition and a transmission rate of each channel.

5 A receiving and transmitting apparatus on a base station side comprising:

5 transmission condition detecting means for monitoring transmission condition of a plurality of channels and determining quality of the transmission condition of each channel.

10 transmission rate detecting means for detecting a transmission rate demanded by each channel,

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15 a maximum rate control information determining means for determining a maximum value of the transmission rate of each channel by taking account of results of said transmission condition detecting means and transmission rate detecting means, and an indication from an operation of other user and

notifying each channel of a determination result of the maximum rate.

20 6 A receiving and transmitting apparatus on a mobile station side comprising:

a voice coding device for coding voice;

a data packeting device for packeting a data signal sequence to a unit of radio signal transmission;

25 a variable rate communication path coding device for conducting error correction coding of a coded voice data

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5        7        A receiving and transmitting apparatus on a mobile  
station side comprising:

10           a variable rate communication path decoding device  
for conducting communication path decoding processing in  
accordance with a transmission rate, such as  
reconstruction and error correction decoding of a frame,  
and matching of a transmission rate, from a received  
15   signal which is output from said demodulation device and  
is slotted to a radio signal transmission unit;

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switching device and a variable rate communication path coding device of a receiving device;

an information source isolating device for isolating a signal in accordance with a difference of information sources, to which a voice/data packet and so forth after decoding outputted from said variable rate communication path decoding device is time-multiplexed;

a voice decoding device for decoding a voice output of a data block isolated in said information source isolating device; and

a continuous data assembling device for reconstructing a packeted reception data to a continuous data.

8 A receiving and transmitting apparatus on a base station side according to claim 5, characterized in that the apparatus is constructed of:

a demodulation device for demodulating a signal of a corresponding channel from a received signal received through a transmitting and receiving antenna and a radio transmitting and receiving device, to which a plurality of channels are multiplexed;

a variable rate communication path decoding device for conducting communication path decoding processing in accordance with a transmission rate, such as reconstruction and error correction decoding of a frame,

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and matching of a transmission rate, from a received signal which is demodulated and is slotted to a radio signal transmission unit in said demodulation device;

5 a transmission condition detecting device for detecting radio wave propagation condition and transmission condition of each communication path, based on an output signal demodulated in said demodulation device;

10 a transmission rate detecting device for detecting a transmission rate of each channel and its error ratio, based on an output signal decoded in said variable rate communication path decoding device; and

15 a maximum rate control information determining device for determining maximum rate control information of each channel, based on an output signal detected by said transmission condition detecting device and transmission rate detecting device.

9 A receiving and transmitting apparatus on a base station side comprising:

20 a variable rate communication path coding device for conducting error correction coding for a signal of each channel, which is output from a maximum rate control information determining device for determining maximum rate control information of each channel, and an addition  
25 of the redundancy bit and matching processing of a

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| DATE       | TIME  | LOCATION | ACTIVITY  | REMARKS |
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| 10/10/2023 | 08:00 | STATION  | ARRIVAL   | ON TIME |
| 10/10/2023 | 08:30 | STATION  | DEPARTURE | ON TIME |
| 10/10/2023 | 09:00 | STATION  | ARRIVAL   | ON TIME |
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| 10/10/2023 | 23:00 | STATION  | ARRIVAL   | ON TIME |
| 10/10/2023 | 23:30 | STATION  | DEPARTURE | ON TIME |